



鋁電解電容器

Aluminum Electorlytic Capacitor

RKG Series 铝电解电容器长寿命品

Aluminum electrolytic Capacitor, Long Life



- 寿命: +125 °C 2000 小时

Life time:+125 °C 2000Hrs

- 符合 RoHS 指令 RoHS compliance

- 符合 AEC-Q200

主要技术性能 Specifications

项目 Items	特性 Characteristics											
使用温度范围 Operating Temperature Range	-40~+125 °C(160~250V), -25~+125 °C(350~450V)											
额定电压范围 Rated Voltage Range	160~450V. DC											
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20°C)											
漏电流(20°C) Leakage Current	$I \leq 0.04CV + 100(\mu A)$ (1 分钟) $I \leq 0.04CV + 100$ (after 1 minutes) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)											
损耗角正切值 Dissipation Factor (120Hz 20°C)	<table border="1"> <tr> <td>WV</td> <td>160~250</td> <td>350~450</td> </tr> <tr> <td>tgδ</td> <td>0.20</td> <td>0.24</td> </tr> </table> <p>容量大于 1000 μF 者, 每增加 1000 μF, 其损耗角正切值增加 0.02 For capacitance exceeding 1000 μF, add 0.02 per increment of 1000 μF</p>	WV	160~250	350~450	tgδ	0.20	0.24					
WV	160~250	350~450										
tgδ	0.20	0.24										
温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz)	<table border="1"> <tr> <td>WV</td> <td>160~250</td> <td>350~450</td> </tr> <tr> <td>$Z_{-25°C} / Z_{+20°C}$</td> <td>3</td> <td>6</td> </tr> <tr> <td>$Z_{-40°C} / Z_{+20°C}$</td> <td>6</td> <td>-</td> </tr> </table>	WV	160~250	350~450	$Z_{-25°C} / Z_{+20°C}$	3	6	$Z_{-40°C} / Z_{+20°C}$	6	-		
WV	160~250	350~450										
$Z_{-25°C} / Z_{+20°C}$	3	6										
$Z_{-40°C} / Z_{+20°C}$	6	-										
耐久性 Load Life	<p>+125°C施加额定电压 2000 小时, 恢复 16 小时后, 电容器应满足要求 After applying rated voltage for 2000~10000 hours at +105°C and then resumed 16 hours. The capacitor shall meet the following limits.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\leq \pm 30\%$ 初始测量值 $\leq \pm 30\%$ of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>\leq 规定值 \leq The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 3 倍规定值 $\leq 300\%$ of the specified value</td> </tr> </table>			电容量变化率 Capacitance Change	$\leq \pm 30\%$ 初始测量值 $\leq \pm 30\%$ of Initial measured value	漏电流值 Leakage	\leq 规定值 \leq The specified value	损耗角正切值 Dissipation Factor	≤ 3 倍规定值 $\leq 300\%$ of the specified value			
电容量变化率 Capacitance Change	$\leq \pm 30\%$ 初始测量值 $\leq \pm 30\%$ of Initial measured value											
漏电流值 Leakage	\leq 规定值 \leq The specified value											
损耗角正切值 Dissipation Factor	≤ 3 倍规定值 $\leq 300\%$ of the specified value											
高温贮存 Shelf Life	<p>+125°C, 1000 小时, 然后按 JISC5101-4 第 4.1 项预处理后测量。 After storage for 1000 hours at +105 °C , the capacitor shall be preconditioned by applying voltage according to Item4.1 of JISC5101-4.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\leq \pm 20\%$ 初始测量值 $\leq \pm 20\%$ of Initial measured value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>\leq 规定值 \leq The specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤ 2 倍规定值 $\leq 200\%$ of the specified value</td> </tr> </table>			电容量变化率 Capacitance Change	$\leq \pm 20\%$ 初始测量值 $\leq \pm 20\%$ of Initial measured value	漏电流值 Leakage	\leq 规定值 \leq The specified value	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 $\leq 200\%$ of the specified value			
电容量变化率 Capacitance Change	$\leq \pm 20\%$ 初始测量值 $\leq \pm 20\%$ of Initial measured value											
漏电流值 Leakage	\leq 规定值 \leq The specified value											
损耗角正切值 Dissipation Factor	≤ 2 倍规定值 $\leq 200\%$ of the specified value											

RKG Series

■ 额定纹波电流的频率系数 Frequency coefficient of rated ripple current

V	频率 (Hz) CAP (μ F)	50	120	300	1K	10K	100K~
		4.7 ~33	0.75	1.00	1.25	1.50	1.80
160~450	47 ~ 150	0.80	1.00	1.15	1.30	1.40	1.50

■ 外形图及尺寸 Case size table



mm

$\Phi D \pm 1.0$	10	12.5 or 13	16	18
L	12, 16, 20, 25	20,25,32	20,25,,32	20,32,36,40
$F \pm 0.5$	5.0		7.5	
$\Phi d \pm 0.05$	0.6		0.8	
a	2.0			

■ 规格壳号、最大允许纹波电流

Standard sizes & Maximum permissible ripple current

wv CAP(μ F)	160V		200V		250V		350V		400V		450V	
	Size	Ripple										
4.7							10×20	53	10×20	53	10×25	58
10			10×20	78	10×20	78	10×25	85	10×25	86	13×20	86
22	10×20	115	10×25	126	13×20	128	13×25	139	13×32	142	16×25	154
33	10×25	154	13×20	157	13×25	171	16×25	189	16×25	189	16×32	203
47	13×20	187	13×25	204	16×25	225	16×32	243	16×32	243		
68	13×25	245	16×20	250	16×32	292						
100	16×25	329	16×25	329								
150	16×32	434										

I~额定纹波电流 Rated ripple current: (mA , 125°C,120Hz)